6. The apparatus of Claim 4, wherein said analog-to-digital converter is integrated within said digital signal processor.

7. The apparatus of Claim 4, wherein each line of said digital composite video is processed by detecting a corresponding horizontal line start.

8. The apparatus of Claim 7, wherein the black level of said composite video line is determined by computing the average of digitized video samples between said horizontal line start and the modulated video signal, for each composite video line.

9. The apparatus of Claim 8, wherein digital composite video samples are processed with respect to said black level to obtain a gray-scale component.

10. The apparatus of Claim 7, wherein the color burst phase of said composite video line is determined by processing the digitized video samples between said horizontal line start and the modulated video signal, for each composite video line.

11. The apparatus of Claim 10, wherein the processing of said digitized video samples is a DFT computation performed to determine at least one coefficient term of the frequency closest to the color sub-carrier of said composite video.

12. The apparatus of Claim 10, wherein the digital composite video samples are mixed with a regenerated sub-carrier frequency having said phase to obtain a first color component, and with a

regenerated sub-carrier frequency having said phase, offset by 90 degrees, to obtain a second color component.

13. The apparatus of Claim 9 and Claim 12, wherein said gray-scale component, first color component, and second color component are further converted to R, G, and B components by means of a linear transformation.

14. A method to convert digital composite video to standard RGB color components comprising the steps of:

detecting a horizontal line start;

detecting the DC level of the color burst sub-carrier for said horizontal line;

detecting the phase of the color burst sub-carrier for said horizontal line;

processing the digital composite samples of said horizontal line with respect to said color burst DC level to generate a gray-scale component;

processing the digital composite samples of said horizontal line with respect to said color burst phase to generate a first color components and a second color component; and

processing said gray-scale component, first color component, and second color component to generate standard color components R, G, and B for said horizontal line.

15. The method of Claim 14, wherein the digital composite video samples of said horizontal line are interpolated to determine a more precise line start reference with respect to preceding and subsequent horizontal lines.

16. The method of Claim 14, wherein said DC level of the color burst sub-carrier is detected by averaging the digital video samples constituting the sub-carrier signal.

17. The method of Claim 14, wherein said phase of the color burst sub-carrier is detected by performing at least one DFT computation to determine the coefficient of the frequency component closest to said sub-carrier frequency.

18. The method of Claim 14, wherein said gray-scale component is obtained by using the DC level of the color burst as the black level reference of a gray-scale representation.

19. The method of Claim 14, wherein said first color component is obtained by mixing a regenerated sub-carrier frequency having said detected phase with the digital composite video samples of said horizontal line.

20. The method of Claim 14, wherein said second color component is obtained by mixing a regenerated sub-carrier frequency having said detected phase, offset by 90 degrees, with the digital composite video samples of said horizontal line.

21. The method of Claim 14, wherein standard color components R, G, and B are a linear transformation of said gray-scale component, first color component, and second color component.